**Group 5:**

**Heidi Cronin:**

The plants compared and investigated are:

* Ferns
* Conifers

Plants, like animals, are classified on structural features (primary connections, n.d).

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| **CONIFERS** | | **FERNS** (Class: Filicopsida): | |
| CHARACTERISTICS: CONIFERS | SIMILARITIES  CONIFERS & FERNS | | CHARACTERISTICS: FERNS |
| * Classed as ‘gymnosperms’. This means that their seeds are not protected as they lie on the upper surface of flat open scales. This term means literally "naked seed' and these plants are seed producing plants where the seeds are not enclosed in an ovary (Mason, n.d). * In order to reproduce the male cones release pollen (spread by wind) that gets caught by female cones. The cone then falls on the ground and, in the right condition, embeds into the ground and grows. | Both conifers and ferns are Phylum Tracheophyta (vascular plants). This means that they (all tracheophyta plants) have true roots, stems, and use leaves for the transport of nutrients and water around the plant. | | * Do not produce seeds- instead they develop brown capsules on the under surface which contain microscopic reproductive spores. * Most ferns reproduce sexually- this involves meiosis and fertilisation. This means that the plant produces spores (the brown dots) that are made up with half the number of chromosomes of the parent plant. * The wind blows the spores and if they land in a suitable location the will grown into a tiny plant called a gametophyte. This plan then produces eggs and sperm. Water then determines whether the sperm makes it to the egg to double the chromosone to grow into a fern.   This is an interesting link about the reproduction of ferns <http://www.sciencelearn.org.nz/Contexts/Ferns/Sci-Media/Video/Fern-reproduction>  Another reproduction link: [fern: Reproduction — Infoplease.com](http://www.infoplease.com/ce6/sci/A0858098.html#ixzz1zeDWAhBo) <http://www.infoplease.com/ce6/sci/A0858098.html#ixzz1zeDWAhBo> |

Additional links/ References:

Primary connections contains information about plant classification: <http://www.science.org.au/primaryconnections/science-background-resource/data/Bio/sub/plantclass/plantclass.htm>

Growing Conifers, J. Mason http://www.acsbookshop.com/products/1678-growing-conifers.aspx